Amdt. dated September 25, 2008

Reply to Final Rejection of June 27, 2008

**AMENDMENTS TO THE CLAIMS:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

Claims 1-12. (Canceled)

13. (Previously presented) In a connection point of a chamber subjected to high pressure in

a body subjected to high pressure of a high-pressure injection system for fuel at a bore, extending

through the body, which extends substantially vertically in the body, the improvement comprising

a cylindrically shaped pocket or an encompassing groove in the chamber subjected to high

pressure of the body, the bore discharging into the cylindrical shaped pocket or the

encompassing groove forming an intersection point, wherein the connection point is the

intersection of a differential pressure chamber, controlling a pressure amplifier, and a control line

in the form of a bore that subjects the differential pressure chamber to pressure or relieves it of

pressure and that leads to a valve that actuates the pressure amplifier.

14. (Previously presented) The connection point according to claim 13, wherein the

cylindrically shaped pocket or the encompassing groove is preferably disposed in the bottom

region of the chamber subjected to high pressure.

Page 2 of 13

15. (Previously presented) The connection point according to claim 13, wherein the

cylindrically shaped pocket or the encompassing groove forms an intersection with the bore that

is free of excessively elevated stress.

16. (Previously presented) The connection point according to claim 13, wherein the

intersection point acts as a notch effect point, at which reduced stress levels  $\sigma_{max,2}$ ,  $\sigma_{max,3}$  are

established in operation of the body subjected to high pressure.

17. (Previously presented) The connection point according to claim 13, wherein the

cylindrically shaped pocket or the encompassing groove is an encompassing groove which is

embodied with a curved or angular contour at a constant depth in the body.

18. (Previously presented) The connection point according to claim 13, wherein the

cylindrically shaped pocket or the encompassing groove is a cylindrically shaped pocket which

is embodied as semicircular, curved, or angular in the wall that defines the chamber.

19. (Previously presented) The connection point according to claim 18, wherein the

cylindrically shaped pocket has its maximum depth at the orifice of the bore.

Claim 20. (Canceled)

21. (Previously presented) The connection point according to claim 13, wherein the connection

point is embodied, depending on the shape of the groove, as an opening of oval or rectangular

geometry.

Claim 22. (Canceled)

23. (Previously presented) The connection point according to claim 13, wherein the control

line is embodied as a through bore in the high-pressure-carrying body.

24. (Previously presented) The connection point according to claim 13, further comprising at

least one further bore connected to the cylindrically shaped pocket or the encompassing groove

in the high-pressure-carrying body.

25. (Previously presented) In a connection point of a cylindrical chamber subjected to high

pressure in a body subjected to high pressure of a high-pressure injection system, a bore,

extending through the body, the improvement comprising a cylindrically shaped pocket or an

encompassing groove in the cylindrical wall of the cylindrical chamber of the body, the bore

discharging into the cylindrical shaped pocket or the encompassing groove and thus forming

an intersection point within the cylindrical shaped pocket or the encompassing groove.

Page 4 of 13

Appl. No. 10/560,911

Amdt. dated September 25, 2008

Reply to Final Rejection of June 27, 2008

26. (Previously presented) The connection point according to claim 25, wherein the

cylindrically shaped pocket or the encompassing groove is preferably disposed in the bottom

region of the cylindrical wall of the cylindrical chamber.

27. (Previously presented) The connection point according to claim 25, wherein the

cylindrically shaped pocket or the encompassing groove forms an intersection with the bore that

is free of excessively elevated stress.

28. (Previously presented) The connection point according to claim 25, wherein the

intersection point acts as a notch effect point, at which reduced stress levels  $\sigma_{max,2}$ ,  $\sigma_{max,3}$  are

established in operation of the body subjected to high pressure.

29. (Previously presented) The connection point according to claim 25, wherein the

cylindrically shaped pocket or the encompassing groove is an encompassing groove which is

embodied with a curved or angular contour at a constant depth in the body.

30. (Previously presented) The connection point according to claim 25, wherein the

cylindrically shaped pocket or the encompassing groove is a cylindrically shaped pocket which

is embodied as semicircular, curved, or angular in the cylindrical wall that defines the chamber.

31. (Previously presented) The connection point according to claim 30, wherein the

cylindrically shaped pocket has its maximum depth at the orifice of the bore.

Page 5 of 13

Appl. No. 10/560,911

Amdt. dated September 25, 2008

Reply to Final Rejection of June 27, 2008

32. (Previously presented) The connection point according to claim 30, wherein the

cylindrically shaped pocket, on both sides of the orifice of the bore, has symmetrical ending

regions into the bore.

33. (Previously presented) The connection point according to claim 25, wherein the connection

point is embodied, depending on the shape of the groove, as an opening of oval or rectangular

geometry.

34. (Previously presented) The connection point according to claim 25, defined by the

intersection of a differential pressure chamber, controlling a pressure amplifier, and a control line

in the form of a bore that subjects the differential pressure chamber to pressure or relieves it of

pressure and that leads to a valve that actuates the pressure amplifier.

35. (Previously presented) The connection point according to claim 25, wherein the control

line is embodied as a through bore in the high-pressure-carrying body.

36. (Previously presented) The connection point according to claim 25, further comprising at

least one further bore connected to the encompassing groove or the encompassing groove in the

high-pressure-carrying body.

37. (New) In a high-pressure fuel injection system having a pressure amplifier that includes a

body and a differential pressure chamber, the differential pressure chamber being connected to

Page 6 of 13

Appl. No. 10/560,911

Amdt. dated September 25, 2008

Reply to Final Rejection of June 27, 2008

a bore which extends through the body and connects to a valve, the improvement comprising a

cylindrically shaped pocket or an encompassing groove in a wall of the differential pressure

chamber, and that the bore discharges into the cylindrical shaped pocket or the encompassing

groove so that the valve, via its connection to the bore and thus to the differential pressure

chamber subjects the differential pressure chamber to pressure or relieves it of pressure and thus

actuates the pressure amplifier.

Page 7 of 13